

### **3.0 INFORMATIONAL HEARING RESPONSES**

#### **3.1 Cultural Resources**

##### **3.1.1 Hearing Data Request Number 1**

###### **Comment**

Is the landscaping at the existing site the original landscape?

###### **Response**

There are no historical records on file with the city regarding the original landscaping at the existing power plant site. The original designs for the power plant do not include information on landscaping. The Primary Record filed for the site by William Self and Associates does not mention trees or landscaping.

#### **3.2 Traffic And Transportation**

##### **3.2.1 Hearing Data Request Number 2**

###### **Comment**

Consider an alternative route for the ammonia delivery. From the 5 freeway, exit Atlantic Avenue, head southeast on Atlantic Avenue then east on Leonis Avenue. This route will avoid numerous sensitive receptors on Slauson Avenue.

###### **Response**

The alternative route suggested by CEC staff for the ammonia delivery has been considered and evaluated. It has been determined that the route is feasible and will be suggested to the ammonia supplier. This route is of some concern due to the Atlantic Avenue exit from the 5 freeway being a congested area. This area is a common spot for automobile accidents and may contribute to a higher risk of an accident for the delivery truck. Both routes will be discussed with the ammonia delivery company and a final safe route will be chosen.

### **3.2.2 Hearing Data Request Number 3**

#### **Comment**

What is the status of the railroad crossing on Slauson east of Boyle? Is it a spur? What is the frequency of the train using this spur?

#### **Response**

The railroad crossing at Slauson Avenue East of Boyle Street is a railroad spur used to deliver materials and goods to local businesses. Detailed information on this line is unavailable. However, there is another track in the same general vicinity along Randolph Street that also switches to spurs in the area. This track is only used once per day. It is therefore expected that the railroad spur crossing Slauson Avenue would also have at most one train crossing per day.

### **3.3 Visual Resources**

#### **3.3.1 Hearing Data Request Number 4**

#### **Comment**

Find out status of the planned school in Huntington Park at the identified KOP from the LA Unified School District. Where is this site in the priority for construction of schools in the district?

#### **Response**

Currently, there is a vacant lot North of the KOP on 58th between Seville and Soto. The Los Angeles Unified School District ("LAUSD") owns the property and is planning on constructing a new elementary school at that location adjacent to the KOP.

The new elementary school project site extends east of Seville and totals 4.03 acres. The proposed elementary school will have 630 seats in 29 classrooms. There will be 3 kindergarten rooms, 18 standard classrooms for grades 1 through 5, and 8 classrooms designated for special education purposes. (Anticipated number of students per classroom in grades 1 through 3 is 21-22. Anticipated number of students per classroom in grades 4 and 5 is 24-25.)

A construction bid strategy meeting was held on May 16, 2002. Request for construction proposal has been established. Notice to Proceed for Construction is anticipated in the 4th quarter of 2002 and construction completion is scheduled for 4th quarter of 2004.

### **3.4 Soil And Water Resources**

#### **3.4.1 Hearing Data Request Number 5**

##### **Comment**

Provide more accurate flow projections for potable water use by employees at the MGS. Currently, the water mass balance shows potable water usage by employees of 5 to 10 gpm.

##### **Response**

The potable water use was based roughly on 100 gal/day/person. The facility will include a shower/locker room for staff personnel as well as sanitary facilities. However, the 5 gpm was developed before the actual personnel estimate was prepared. Five gpm was utilized as a conservative number to ensure that the plant does not underestimate its water requirements and this value has been used on several recent projects of similar size.

The 32 people identified are permanent staff and does not account for temporary technicians, contract maintenance personnel, visitors, etc. The 10 gpm is identified for outages when the staff is increased greatly for short periods.

If a minimum value is required, the potable water use could be reduced to 3 gpm. However, it is not recommended that any number lower than 3 gpm be used for planning purposes.

The process water demand was based on 0.75% of main steam flow, which is typical for HRSG's in this type of project.

#### **3.4.2 Hearing Data Request Number 6**

##### **Comment**

Provide a write-up of alternatives that were thought about and evaluated for cooling, steam condensing, etc.

##### **Response**

One alternative for plant cooling would be dry cooling or a hybrid wet/dry cooling in lieu of a wet cooling tower and condenser. Dry cooling or wet/dry cooling are proven technologies and are used in areas with severe water restrictions. There are however, significant drawbacks to this technology. The three main drawbacks are the initial cost, reduction in power output, and space requirements.

The capital costs are significantly higher for the air-cooled condenser and as noted herein in the efficiency and thus the operating cost would also be significantly higher.

The air-cooled condenser cannot achieve the same condenser pressure as a conventional cooling tower/condenser. This results in either lower generation and or less efficient plant efficiency. In addition, high ambient temperatures also limit generation. Generally a reduction of 3% or 4% is typical when comparing a conventional cooling tower to a dry system.

The final item is space availability. The Vernon site is very small. The added space requirement, approximately twice the area would be very difficult to accommodate at this site.

Since reclaimed water was available at a reasonable cost, the above alternative was not pursued in detail.

The wet/dry cooling option has less commercial experience and had the same drawbacks as identified above. It was also not considered viable.

Another area to be reviewed was to evaluate reductions in wastewater stream. A common alternative method is a wastewater concentrator or evaporator. The same three main drawbacks also apply to this option. They are the initial cost, added auxiliary power, and space requirements.

The costs for this type of waste reduction are significant and would have made a significant impact on the economic viability of the project. A detailed cost estimate was not prepared.

Operating a waste concentrator and evaporator requires a significant amount of auxiliary power. The primary power requirement comes from evaporating water. Either the project would generate less net power or the power generation equipment would have to be larger to accommodate the losses.

The final item is space availability. The Vernon site is very small. The added space requirement, approximately twice the area would be very difficult to accommodate at this site.

Since the existing wastewater collection systems are able to handle the maximum waste stream without significant impact this alternative was not pursued.

### **3.4.3 Hearing Data Request Number 7**

#### **Comment**

Provide plans on how reclaimed water will be kept from mixing with potable water.

### **Response**

The Project shall provide an approved back flow preventer on the section of the new potable water line that would provide backup water to the reclaimed water tank. In addition, the potable water line to the 480,000 gallon reclaim water tank will include an air gap at the roof of the raw water storage tank. The City will prepare a report in accordance with §60314 which includes: 1) a detailed description of the intended use of reclaimed water; 2) plans and specifications of the reclaimed water system; and 3) methods to be used by the recycled water agency to assure that the installation and operation of the dual plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. All recycled wastewater lines, valve boxes, and appurtenances shall be identified to clearly distinguish between recycled wastewater and potable water systems.

The City shall appoint an on-site water supervisor having the responsibility for the protection of the potable water system from cross-connections. The water supervisor shall be responsible for installation, operation, and maintenance of the recycled wastewater and potable water systems, prevention of potential hazards, implementing these guidelines and coordination with cross-connection control program of the water purveyor and County of Los Angeles Department of Health Services. Authorizations for piping changes or additions to either the potable or recycled wastewater systems shall be subject to review and approval by the water supervisor, whose name and title shall be reported to the water purveyor and the County of Los Angeles Department of Health Services.

#### **3.4.4 Hearing Data Request Number 8**

### **Comment**

Provide information on any sediment controls in the storm drain system as well as clean-outs and monitoring plans.

### **Response**

The LACDPW is conducting BMP surveys throughout their jurisdiction. Numerous BMPs have been installed and are being monitored. Some BMPs have been installed to establish a base line for the "Trash" TMDL in the Los Angeles River. As part of this program, nylon bags were recently installed into the catch basins located at the corners of Soto Street and East 50th Street and Seville Avenue and East 50th Street to capture trash. The nylon bags span the width of the catch basins and extend back approximately 18 inches. BMP vendors remove the trash from the nylon bags on a regular basis to determine the trash baseline for the area.

### **3.5 Transmission System Engineering**

#### **3.5.1 Hearing Data Request Number 9**

##### **Comment**

Southern California Edison (SCE) has indicated that they must conduct a Transmission System Impact Study to assess the reliability impacts of the Malburg project on SCE's grid. Staff believes this study will be available for our review just prior to the evidentiary hearings but should it be delayed staff would be unable to include the study conclusions in our testimony. Staff is coordinating with the Cal-ISO and SCE to determine if the implications of the study could possibly change our present conclusions, which are based on the Malburg Project Interconnection Study. Should we conclude that it would not, then there would be no schedule implications due to receipt of the SCE study.

##### **Response**

Southern California Edison has performed their own impact analysis of the MGS on the SCE system. Their assessment is included as Attachment 3.

### **3.6 Air Quality**

#### **3.6.1 Hearing Data Request Number 10**

##### **Comment**

Staff has identified one significant issue regarding the proposed MGS. The applicant is not currently proposing mitigation or offsets for the project sulfur dioxide (SO<sub>2</sub>) emission, which could contribute to secondary particulate matter formation less than 10 microns in diameter (PM<sub>10</sub>).

The MGS will have a net increase of less than 4 tons per year of SO<sub>2</sub> emissions. In staff's opinion it is very unlikely that the MGS will cause or contribute to an exceedance of any SO<sub>2</sub> federal or state ambient air quality standards. However, this area is in nonattainment for PM<sub>10</sub> federal and state ambient air quality standards and SO<sub>2</sub> is a known contributor to secondary PM<sub>10</sub> formation. Therefore, it is staff's opinion that the MGS SO<sub>2</sub> emissions have the potential to cause or contribute to an exceedance of the PM<sub>10</sub> federal and state ambient air quality standards if left unmitigated.

##### **Response**

Assuming all emissions of SO<sub>2</sub> converts to PM<sub>10</sub> on a mol-to-mol basis, this would result in an increase emissions of PM<sub>10</sub> of approximately 0.43 pounds per hour. This is approximately 10 percent of the current estimated PM<sub>10</sub> emission from the MGS. An

increase of 10% in emissions will result in an approximate 10% increase in the ground level impact. This 10% increase will not exceed the federal and state PM<sub>10</sub> ambient air quality standards. Therefore violations of the SO<sub>2</sub> and PM<sub>10</sub> ambient air quality standards are not expected by the MGS and further mitigation is not required. A detailed calculation is shown below.

Calculation of Secondary PM<sub>10</sub> Emission Rate due to Conversion from Sulfur Dioxide

- (1) Sulfur dioxide (SO<sub>2</sub>) emission rate from one CTG = 0.21 lb/hr
- (2) Molecular weight of SO<sub>2</sub> = 64 lb/lb-mol
- (3) Sulfur Dioxide Emission Rate from one CTG in lb-mol/hr = 0.21/64  
= 0.00328 lb-mol/hr
- (4) Molecular Weight of Ammonium Sulfate [(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>] = 132 lb/lb-mol
- (5) (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> emission rate, assuming 100% conversion from SO<sub>2</sub> = 0.00328 x 132  
= 0.433 lb/hr
- (6) PM<sub>10</sub> emission rate, assuming all (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> is PM<sub>10</sub> = 0.433 lb/hr

Calculation of Percentage Increase in PM<sub>10</sub> Emission Rate from one CTG due to Secondary PM<sub>10</sub> Formation

- (1) PM<sub>10</sub> emission rate from one CTG = 4.00 lb/hr
- (2) PM<sub>10</sub> emission rate from secondary PM<sub>10</sub> formation = 0.43 lb/hr
- (3) Total PM<sub>10</sub> emission rate = 4.43 lb/hr
- (4) Increase in PM<sub>10</sub> emission due to secondary PM<sub>10</sub> formation = (0.43 x 100/4.43)  
= 10 percent

Calculation of PM<sub>10</sub> Maximum 24-hour and Annual Impacts from Normal Operation of the MGS (Including 2 CTGs, 2 Cooling Towers, and one Emergency Firewater Diesel Pump)

- (1) Maximum 24-hour PM<sub>10</sub> Impact from the normal operation of the MGS (Table 9-3, Information Requested in the CEC's Data Requests, June 2002)  
= 1.28 µg/m<sup>3</sup>
- (2) Total 24-hour PM<sub>10</sub> Impact from the normal operation of the MGS, including the secondary PM<sub>10</sub> formation = 1.28 x 1.10 = 1.41 µg/m<sup>3</sup>

- (3) Annual  $PM_{10}$  Impact from the normal operation of the MGS  
(Table 9-3, Information Requested in the CEC's Data Requests, June 2002)  
 $= 0.39 \mu\text{g}/\text{m}^3$
- (4) Total Annual  $PM_{10}$  Impact from the normal operation of the MGS,  
including the secondary  $PM_{10}$  formation  $= 0.39 \times 1.10 = 0.43 \mu\text{g}/\text{m}^3$

### 3.7 Public Health

#### 3.7.1 Hearing Data Request Number 11

##### Comment

Per AB2588, the blackstart back up generator needs to be included in the modeling. Although it is an existing use, it still has to be modeled since it will be used for the new project.

##### Response

A revised health risk assessment is being prepared for the MGS to include toxic air contaminant emissions from the emergency blackstart generator. The results will be available by the end of the month and presented at that time.

#### 3.7.2 Hearing Data Request Number 12

##### Comment

Is ELIMIN-OX a carbonylhydrazide product?

##### Response

Yes, Ondeo-Nalco reports that Eliminox has been used in the utility industry since 1990 and is not regulated as a hazardous waste or toxic pollutant. The ELIMIN-OX product is a carbonylhydrazide,  $(\text{N}_2\text{H}_3)_2\text{CO}$ . Fact sheets for ELIMN-OX and carbonylhydrazide are presented as Attachment 4 to this document.